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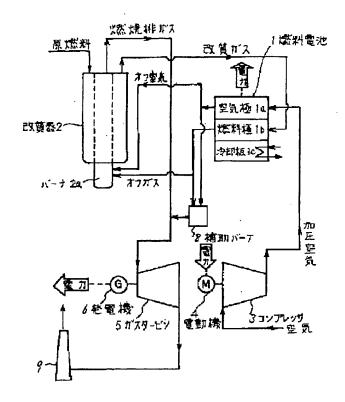
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TITLE

OPERATING METHOD OF FUEL

CELL/GAS TURBINE COMPOSITE

GENERATING SYSTEM



ABSTRACT :

PURPOSE: To moderate the temperature condition to a reformer, on a composite generating system in which a pressure type fuel cell is combined with a gas turbine, and also recover the raw fuel inputted to the generating system as a power with a high thermal efficiency.

CONSTITUTION: A composite generating system is formed of a pressure type fuel cell 1 for generating an electric power by using, as a reaction gas, the reformed gas from a fuel reformer 2 and the pressurized air from a compressor 3 driven by an electric motor 4; a gas turbine 5 for obtaining a power by using, as an operating fluid, the combustion exhaust gas from the reformer and the combustion gas turbine of an auxiliary burner 8; and a generator 6 driven by the shaft horsepower of the gas turbine. To this composite generating system, an additional fuel according to the off-air quantity from the fuel cell is excessively supplied as a raw fuel from the reformer to lower the reaction equilibrating temperature of the reformer, and a large additional output is also obtained from the gas turbine and the generator with a high thermal efficiency.

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